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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/665,817

09/18/2003

Yasushi Yamamoto

WAM-04701

6632

26339

7590

07/27/2005

PATENT GROUP

CHOATE, HALL & STEWART

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BOSTON, MA 02109

EXAMINER

TAKAOKA, DEAN O

ART UNIT

PAPER NUMBER

2817

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/665,817	Applicant(s) YAMAMOTO ET AL.	
	Examiner Dean O. Takaoka	Art Unit 2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7 is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/1/05</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Kommrusch (US Patent No. 5,933,062), for reasons of record contained in the Office action dated December 23, 2004.

Claim 1:

Adds “to obtain desired filter characteristics”.

Kommrusch teaches the ladder SAW filter (Fig. 3) where Kommrusch further teaches the resonant and anti-resonant frequency (f_a , f_s ; col. 4, line 64 to col. 5, line 9) where Kommrusch further teaches when adding an inductor across the SAW (e.g. parallel), static capacitance C_o is reduced making the ratio of C_m/C_o larger thus increasing the separation of f_s and f_a , thus inherently achieving a desired filter characteristic.

It is the position of the Examiner that the amendments to claim 1 does not patentably distinguish over the applied prior art thus remain anticipated by Kommrusch.

Claims 2 – 6:

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Claims 3 and 6 adds the word "said". Claims 2, 4 and 5 remain original. It is the position of the Examiner that the amendments to the claims does not patentably distinguish over the applied prior art thus remain anticipated by Kommrusch.

Response to Arguments

Applicant's arguments filed June 29, 2005 have been fully considered but they are not persuasive.

Applicant submits "Kommrusch does not teach or fairly suggest at least the above-noted features as claimed by the Applicants" (e.g. amended limitation of claim 1, see page 5) where the Applicant directs attention to figure 6 of Kommrusch "which does not illustrate a change in the resonant and anti-resonant point frequencies by the addition of the inductor" where "the inductance connected to the resonator of Kommrusch is too small to adjust the resonant point frequency" (page 6) to which the Examiner disagrees.

Fig 6 of Kommrusch shows frequency responses of the filter without the parallel inductors (50) and with the parallel inductors (52). Kommrusch explicitly recites where using the parallel inductors, the filter frequency response is improved where insertion loss and stopband response are improved. Furthermore Kommrusch shows a shift of the lower frequency at -60db, thus corresponding to the anti-resonant point. The additional teaching of Kommrusch (col. 4, line 64 to col. 5, line 9; where Kommrusch teaches when adding an inductor across the SAW (e.g. parallel), C_0 (static capacitance) is reduced making the ratio of C_m/C_0 larger and thus increasing the separation of f_s and f_a),

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further exemplifies separation or change of resonant and anti-resonant frequencies. With respect to inductance, Kommrusch only recites using a low Q inductor as opposed to high Q inductors, where the actual inductance value L does not appear to be recited by Kommrusch, thus where any low inductance value, such as stated by the Applicant is at best speculative. It is the position of the Examiner that Kommrusch not only teaches resonant and anti-resonant frequencies but where the separation of f_s and f_a are explicitly recited and where it is inherent the design of Kommrusch achieves a desired response, thus where claims 1 – 6 remain anticipated by the prior art of record and remain rejected under 35 U.S.C. 102(b) as being anticipated by Kommrusch.

Allowable Subject Matter

Claim 7 is allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Kommrusch does not teach or suggest a second inductor connected in series to the other of the first and second SAW resonators.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory

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period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dean O. Takaoka whose telephone number is (571) 272-1772. The examiner can normally be reached on 8:30a - 5:00p Mon - Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571) 272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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July 22, 2005